

1. A device comprising:

an anonymity setting processing means an expression specifying a person in the input document having a specificity which is greater than a predetermined threshold.

the anonymity setting processing unit rewrites a person name having a specificity which is greater than a predetermined threshold.

the anonymity setting processing unit rewrites a modification expression having a specificity which

is greater than a predetermined threshold.

4. The device according to claim 1, wherein the specificity calculating unit includes:

a sentence extracting means extracting a
5 sentence from an input document;

a part-of-speech analyzing means decomposing
the extracted sentence for each part of speech;

a name extracting means extracting a person name
based on a person name extracting rule from a result
10 of the part-of-speech analysis; and

a name specificity calculating means
calculating a specificity of the name thus extracted
based on statistical information.

5. The device according to claim 1, wherein the
15 specificity calculating unit further includes:

a syntax analyzing means creating a syntax tree
indicative of a modification relationship between
clauses based on a syntax analyzing rule from a result
of a part-of-speech analysis;

20 a person specifying tree extracting means
extracting a tree structure specifying a person as a
person modification expression based on a person
specifying tree extracting rule for the tree structure
obtained by the parsing unit; and

25 a tree structure specificity calculating means
calculating a specificity of the person specifying
tree thus extracted based on statistical information.

6. The device according to claim 4 or 5, wherein the specificity calculating unit includes a reference specificity database registering specificity data having a set of an expression specifying a person, a type of a person name or a modification expression and a specificity which are created based on an existing document.

7. The device according to claim 4 or 5, wherein the specificity calculating unit includes a database creating means extracting a person name and a modification expression for each document from an existing document of a document database to calculate a specificity and for creating a reference specificity database registering specificity data having a set of an expression specifying a person, a type of a person name or a modification expression and a specificity.

8. The device according to claim 1, wherein the anonymity setting processing unit has a non-anonymity requiring database registering a non-anonymity requiring expression and a expression registered in the non-anonymity requiring database in an expression specifying a person extracted from an input document is not rewritten to anonymity expression.

9. The device according to claim 1, wherein the anonymity setting processing unit has an anonymity requiring database registering an expression to be rewritten to anonymity expression and all expressions

in an input document registered in the anonymity requiring database are rewritten to the anonymity expression.

10. The device according to claim 1, wherein the
5 anonymity setting processing unit rewrites an expression specifying a person extracted from an input document to no mean.

11. The device according to claim 1, wherein the
10 anonymity setting processing unit replaces an expression specifying a person extracted from an input document to a low specificity expression having a specificity which is equal to or smaller than a threshold to be used for rewriting with an anonymity expression.

12. The device according to claim 1, wherein the
15 anonymity setting processing unit encryptes an expression specifying a person extracted from an input document to carry out rewriting with an anonymity expression.

13. The device according to claim 15, further
20 comprising a decrypting indicating means decrypting and displaying an encrypted expression when someone reads a rewritten document with an anonymity expression through encrypting by the anonymity setting processing
25 unit.

14. A method comprising:

a specificity calculating step of extracting an

expression specifying a person from the input document and calculating a specificity to evaluate a degree of specificity at which the expression specifying a person; and

- 5 an anonymity setting processing of rewriting with an anonymity expression in the input document which has a greater specificity than a predetermined threshold.

10 15. The method according to claim 14, wherein the specificity calculating step extracts a person name from the input document and calculates a specificity to evaluate a degree of intensity at which the person name thus extracted can specify a person, and

- 15 the anonymity setting processing step anonymity sets a person name having a greater specificity than a predetermined threshold.

20 16. The method according to claim 14, wherein the specificity calculating step extracts a modification expression of a person name from the input document, calculates a specificity to evaluate a degree of intensity at which the modification expression thus extracted can specify a person, and the anonymity setting processing step sets a
25 modification expression having a greater specificity than a predetermined threshold.

17. The method according to claim 14, wherein

the specificity calculating step includes:

a sentence extracting step of extracting a sentence from an input document;

a part-of-speech analyzing step of
5 discriminating the extracted sentence for each part of speech;

a person name extracting step of extracting a person name based on a name extracting rule from a result of the part-of-speech analysis; and

10 a person name specificity calculating step of calculating a specificity of a person name thus extracted based on statistical information.

18. The method according to claim 14, wherein the specificity calculating step further includes:

15 a syntax analyzing step of creating a syntax tree indicative of a modification relationship between clauses based on a syntax analyzing rule from the result of the part-of-speech analysis;

a tree structure specifying a person extracting
20 step of extracting a tree structure specifying a person as a person modification expression based on a person specifying tree extracting rule for the syntax tree obtained at the syntax analyzing step; and

a tree structure specificity calculating step
25 of calculating a specificity of the tree structure specifying a person thus extracted based on statistical information.

19. The method according to claim 17 or 18,
wherein the specificity calculating step takes a
weight average of a specificity obtained by a
calculation of an expression which specify a person
5 extracted from the input document with a specificity
registered in a reference specificity database
registering specificity data having a set of an
expression specifying a person created based on an
existing document, a type of a person name or a
10 modification expression and a specificity, and
normalizes the weight average.

20. The method according to claim 17 or 18,
wherein the specificity calculating step includes a
database creating step of extracting a person name and
15 a modification expression for each document from an
existing document of a document database to calculate
a specificity and creating the reference specificity
database registering specificity data having a set of
an expression specifying a person, a type of a person
20 name or a modification expression and a specificity.

21. The method according to claim 14, further
comprising an anonymity setting indicating step of
setting and changing a threshold to be used at the
anonymity setting processing step.

22. The method according to claim 14, wherein
the anonymity setting method retains, in a threshold
database, a threshold used in an anonymity setting

processing for each processing document and sets a last threshold as a default during the anonymity setting processing of a new input document.

23. The method according to claim 14, wherein
5 the anonymity setting processing step does not replace a registered expression with reference to a non-anonymity setting requiring database in an anonymity setting expression extracted from an input document.

24. The method according to claim 14, wherein
10 the anonymity setting processing step all expressions is rewritten with anonymity expression in an input document registered in an anonymity setting database registering an expression to be always subjected to rewrite with an anonymity expression.

15 25. The method according to claim 14, wherein the anonymity setting processing step replace an expression which specifies a person extracted from an input document into a rewriting to meaningless expression.

20 26. The method according to claim 14, wherein the anonymity setting processing step replaces an expression specifying a person extracted from an input document with a low specificity expression having a specificity equal to or lower than a threshold which
25 is to be used for rewriting of the expressions specifying a person.

27. The method according to claim 14, wherein

the anonymity setting processing step encodes an expression specifying a person extracted from an input document, thereby carrying out anonymity setting.

28. The method according to claim 27, further comprising a decrypting indicating step of decoding and displaying an encrypted expression specifying a person when reading an anonymity setting document which is subjected to the anonymity setting through the encoding at the anonymity setting processing step.

29. A computer readable recording medium recording an anonymity setting program comprising:

a specificity calculating an expression specifying a person from the input document and calculating a specificity to evaluate a degree of intensity at which the expression specifying a person; and

an anonymity setting replacement a expression in the input document which has a greater specificity than a predetermined threshold.